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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,346	12/19/2001	Michael Bender	52051	9064

26474 7590 05/19/2003

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1350 CONNECTICUT AVENUE, N.W.  
WASHINGTON, DC 20036

EXAMINER

TRAN, BINH Q

ART UNIT	PAPER NUMBER
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3748

8

DATE MAILED: 05/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/021,346

Applicant(s)

BENDER ET AL.

Examiner

BINH Q. TRAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 4-8 is/are allowed.
- 6) ☒ Claim(s) 2,9 and 10 is/are rejected.
- 7) ☒ Claim(s) 3, 11-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This office action is in response to the amendment filed March 04, 2003.

#### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 2, and 9-10 are rejected under 35 U.S.C. 102 (b) as being anticipated by Koch et al. (Koch) (Patent Number 3,828,736).***

Regarding claims 9-10, Kock discloses converter for a catalytic conversion of fuel (See Figure 1), comprising a vaporization space (6) and a conversion space (1) connected thereto, the vaporization space having separate feeds for exhaust gas (9) or intake air (8) and fuel (5), the conversion space having a catalyst for the catalytic conversion of fuel and the vaporization space and the conversion space being connected to one another so that heat transport from the conversion space into the vaporization space is possible (See col. 2, lines 24-61; col. 3, lines 18-45).

Regarding claim 2, Kock further discloses that the fuel is dehydrogenated or partially oxidized (e.g. See col. 3, lines 55-67; col. 4, lines 1-21).

***Allowable Subject Matter***

Claims 1, and 4-8 are allowed.

Claims 3, and 11-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Since allowable subject matter has been indicated, applicant is encouraged to submit formal drawings in response to this Office action. The early submission of formal drawings will permit the Office to review the drawings for acceptability and to resolve any informalities remaining therein before the application is passed to issue. This will avoid possible delays in the issue process.

***Response to Arguments***

Applicant's arguments filed March 04, 2003 have been fully considered but they are not completely persuasive. ***Claims 1-15 are pending.***

Applicant's cooperation in correcting the informalities in the specification are appreciated. Applicant's cooperation in amending the claims to overcome the claim objections relating to informalities as well as indefinite claim language is also appreciated.

Applicants have argued that Koch do not teach or suggest Applicants's claimed invention. More specifically, Applicants assert that the reference to Koch fails to disclose "*the fuel and the intake air are not fed separately from one another into the converter*". In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "*the fuel and the intake air are not fed separately from one another into the converter.*") are not recited in the rejected claim(s). Although the

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claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In addition, the examiner respectfully disagrees with applicants that Koch do not teach or suggest that “*the fuel and the intake air are not fed separately from one another into the converter*”. In column 2, lines 34-61, Koch discloses that “The fuel is fed by pump 4, via a pipeline 5 to an evaporator 6 ahead of the entrance of the catalyst chamber 1. A mixing nozzle 7, for mixing the evaporated fuel with the oxygen containing gas is at the evaporator 6. Fresh air can be fed to the mixing nozzle 7, via a pipeline 8. A part of the exhaust gases of the combustion engine through pipeline 9 is fed to the evaporated fuel at mixing nozzle 7. The fuel gas mixture flows, through a pipeline 10, to the catalyst chamber 1, in which the fuel is converted into a gas containing methane and carbon monoxide. Located at the output of the catalyst chamber 1 is a further mixing nozzle 11 for mixing the gas mixture, obtained by the conversion of the fuel at the catalyst, with fresh air fed to the mixing nozzle 11 via pipeline 12. The mixture obtained in this manner flows through pipeline 13 to the combustion engine 14, for instance an internal combustion engine or a gas turbine, and is burned thereat.” Koch has clearly meet the claimed limitations above .

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the

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date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (703) 305-0245. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (703) 308-2623. The fax phone number for this group is (703) 746-4561.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

BT  
May 15, 2003



Binh Tran  
Patent Examiner  
Art Unit 3748



THOMAS DENION  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700